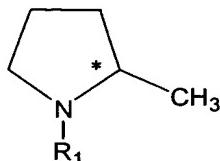


**WHAT IS CLAIMED IS:**

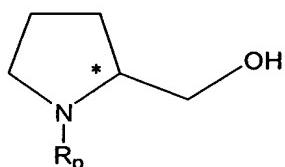
1. A process for preparing a compound of formula (V):



(V) ,

wherein \* is a chiral center that can be designated as a R- or S-stereocenter, R<sub>1</sub> is hydrogen or a nitrogen-protecting group (R<sub>p</sub>), or a salt thereof, comprising the steps of:

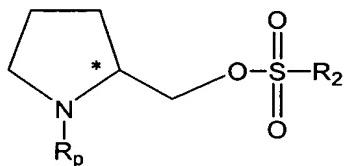
- 1a) providing a compound of formula (II):



(II)

wherein \* is as previously defined and R<sub>p</sub> is a nitrogen-protecting group;

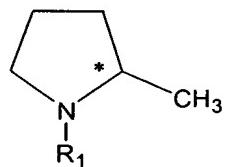
- 1b) treating a compound of formula (II) with a sulfonylating reagent to obtain a compound of formula (III):



(III)

wherein \* and R<sub>p</sub> are as previously defined and R<sub>2</sub> is an unsubstituted alkyl, substituted alkyl, unsubstituted aryl, or substituted aryl group;

- 1c) reacting the -O-S(O)<sub>2</sub>-R<sub>2</sub> group in a compound of formula (III) with an alkali metal triethylborohydride to obtain the desired enantiomer of a compound of formula (V):

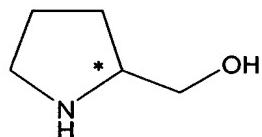


(V)

wherein \* and R<sub>1</sub> are as previously defined.

2. The process according to claim 1, wherein the compound formula (II) is provided by a process comprising the steps of:

2a) providing a desired enantiomer of prolinol having the formula (I):



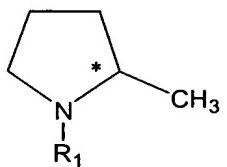
(I)

wherein \* denotes a chiral center that can be designated as a R- or S-stereocenter; and

2b) protecting the nitrogen atom of the amine group in a compound of formula (I) with a nitrogen-protecting group to obtain a compound of formula (II).

3. The process according to claim 1, wherein R<sub>p</sub> in the compound of formula (II) is selected from the group consisting of acetyl, benzoyl, benzyl, benzyloxycarbonyl (Cbz), formyl, phenylsulfonyl, pivaloyl, tert-butoxycarbonyl (Boc), tert-butylacetyl, and triphenylmethyl (trityl).

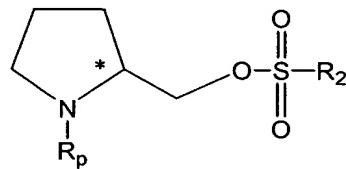
4. A process for preparing a compound of formula (V):



(V)

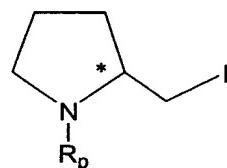
wherein R<sub>1</sub> is hydrogen or a nitrogen-protecting group, or a salt thereof, comprising the steps of:

- 4a) providing a compound of formula (III):



(III)

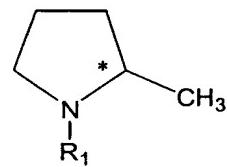
wherein \* denotes a chiral center that can be designated as a R- or S-stereocenter, R<sub>p</sub> is a nitrogen-protecting group, and R<sub>2</sub> is an unsubstituted alkyl, substituted alkyl, unsubstituted aryl, or substituted aryl group, and treating the compound of formula (III) with an alkali metal iodide salt to obtain a compound of the formula (IV):



(IV),

wherein \* and R<sub>p</sub> are as defined for a compound of formula (III); and

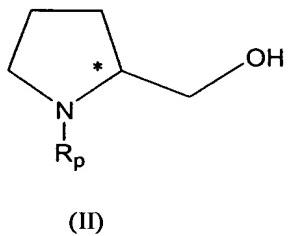
- 4b) hydrogenating a compound of formula (IV) to obtain a desired enantiomer of a compound of formula (V):



(V),

wherein \* and R<sub>1</sub> are as previously defined.

5. The process according to claim 4, wherein step 4a) is substituted with a step comprising reacting a compound of formula (II):



wherein \* is as previously defined and R<sub>p</sub> is a nitrogen-protecting group, with an iodine reagent to obtain a compound of formula (IV).

6. A process for preparing a N-protected-2-methylpyrrolidine compound, comprising the steps of:

- 6a) treating the hydroxy group of an N-protected prolinol with a sulfonylating reagent to obtain an N-protected-2-(alkyl- or aryl)sulfonate ester of prolinol; and
- 6b) reacting the N-protected-2-(alkyl- or aryl)sulfonate ester of prolinol with an alkali metal triethylborohydride to obtain N-protected-2-methylpyrrolidine.

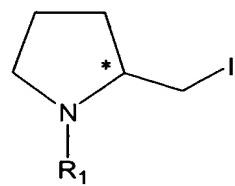
7. A process for preparing a N-protected-2-methylpyrrolidine compound, comprising the steps of:

- 7a) reacting a N-protected prolinol with an iodine reagent and or reacting a N-protected-2-(alkyl- or aryl)sulfonate ester of prolinol with an iodide salt to obtain an N-protected-2-iodomethylpyrrolidine; and
- 7b) hydrogenating the N-protected-2-iodomethylpyrrolidine to obtain N-protected-2-methylpyrrolidine.

8. A compound made by the process of claims 1, 5, 7, and 9.

9. The compound of claim 8, wherein the compound is further treated to obtain a compound useful for modulating a histamine-3 receptor.

10. A compound of the formula (VIII):



(VIII)

wherein \* denotes a chiral center that can be designated as a R- or S-stereoecenter, and  $R_1$  is a nitrogen protecting group.